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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christopher J. Leonard  
Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

EXAMINER

RUTLEDGE, AMELIA L

ART UNIT PAPER NUMBER

2176

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/731,597

Applicant(s)

LITTLE ET AL.

Examiner

Amelia Rutledge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/08/06; 06/13/06</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed 08/24/2006; Declaration under 37 CFR 1.131, filed 08/24/2006; IDS filed 06/13/2006; IDS filed 05/08/2006.
2. Claims 1-18 are pending in the case. Claims 1, 3, 5, and 7 are independent claims.

### ***Response to Amendment***

3. The Declaration filed on 08/24/2006 under 37 CFR 1.131 is sufficient to overcome the Fordin reference (Fordin, "Java Architecture for XML Binding: Executive Summary", Sun Microsystems, published July 2003, p. 1-7.). However, upon further consideration, a new ground of rejection is made in view of Skonnard. Applicant's amendments to the claims required a new search which produced the new ground(s) of rejection.

### ***Information Disclosure Statement***

3. The information disclosure statement filed 06/13/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. In this

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case, the Information Disclosure Statement cites a beta release with system code, however, a copy of the information has not been furnished with the IDS.

The information disclosure statement filed 05/08/2006 has been considered by the examiner.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 and 2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim 1 has been amended to add the limitation "a user interface for allowing a user to select resources in an ML schema library". A search of the specification found no description of "a user interface", rather "an application programming interface" was described. Therefore the claimed user interface presents new matter and must be rejected under 35 U.S.C. 112, first paragraph. Claim 2 depends from claim 1 and is rejected for incorporating the deficiencies of its base claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

In regard to independent claims 1, 3, and 5, claims 1, 3, and 5 cite A *programmable object for accessing the resources of a Markup Language (ML) schema library, comprising: a user interface for allowing a user to select resources in a ML schema library* (Claim 1). As claimed, the *programmable object* and *application programming interface* (API) as well as the rest of the claim limitations, are nonfunctional descriptive material for at least two reasons. First, nonfunctional descriptive material is claimed because the invention is not recorded on a computer readable medium. Secondly, even if the invention were recorded on a computer readable medium, it would not be statutory because no requisite functionality is present to satisfy the practical application requirement. See *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, p. 1-2. Rather, the claimed invention is directed toward an abstract idea, or at best, software *per se*.

Specifically, a *programmable object* was known in the art to be: 1. the structural foundation for an object-oriented language... This foundation includes such principles as abstraction, concurrency, encapsulation, hierarchy, persistence, polymorphism, and typing... 2. The structural foundation for an object-oriented design. 3. The structural foundation for an object-oriented application (Microsoft Computer Dictionary, copyright

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2002, Microsoft Corporation, p. 372). And, an *API* was known in the art as: A set of routines used by an application program to direct the performance of procedures by the computer's operating system (Microsoft Computer Dictionary, copyright 2002, Microsoft Corporation, p. 33). At best, the claimed invention describes a model or abstract foundation of ideas and a set of program routines which represents a manipulation of abstract ideas (*Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, p. 58).

**Regarding independent claim 7**, for similar reasons, independent claim 7 is also not statutory. Claim 7 claims nonfunctional descriptive material for the reasons explained above. Further, while claim 7 represents a collection of abstract ideas, even if the invention were recorded on some computer readable medium the invention would lack practical application since the result of the invention is *receiving access to the functionality identified in the ML schema library associated with the object property passed to the XML schema library*, and access to functionality does not result in a practical application.

**In regard to dependent claims 2, 4, 6, and 8-18**, claims 2, 4, 6, and 8-18 are rejected because they add nothing to render the claimed subject matter statutory.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Skonnard, "What's New in MSXML 4.0", p. 1-12, published December, 2001 in MSDN Magazine, available at:**

**<http://msdn.microsoft.com/msdnmag/issues/01/12/xml>.**

**Regarding independent claim 1**, Skonnard teaches a programmable object for accessing the resources of a Markup Language (ML) schema library (p. 2-3, "A New XML Schema API: SOM"); Skonnard teaches a Schema Object Model (SOM) which is loaded into a programmable object and associated with a namespace URI (p. 3, par. 1). Skonnard teaches an API interface for allowing a user to select resources in a ML schema library (p. 4, par. 1). Skonnard teaches an association requestor for requesting association of a ML schema file to a ML markup applied to a document in response to the user selecting resources in an ML schema library (p. 7, "XPath and Type Information") since Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, par. 8). Skonnard teaches a markup applier for applying the ML markup to the document in response to the requested association of an ML schema file to an ML

markup, since Skonnard teaches the interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, par. 8), and also discloses the MSXMLWriter classes which allow the user to control the Markup Language output, i.e., a markup applier for applying the markup to the document.

**Regarding dependent claim 2,** Skonnard teaches that the association requester is arranged to request removal of an association of the ML schema file to the ML markup applied to the document, and that the association requester is further operative to receive a return value from the schema library responsive to removal of the association of the ML schema file to the markup applied to the document, (p. 7, "XPath and Type Information") since Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, par. 8). Specifically, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, therefore, it is implied in the disclosure of Skonnard that the function setting the association property allows removal of an association since the property may be reset, resulting in the removal of the association and receiving a return value from the schema library responsive to removal of the association, as depicted in Figs. 9 and 10.



**Regarding independent claim 3**, Skonnard teaches a programmable object for accessing the resources of a Markup Language (ML) schema library (p. 2-3, "A New XML Schema API: SOM"), comprising an application programming interface for allowing a user to programmatically access resources identified in an ML schema library (p. 4, especially par. 1); the application programming interface comprising a message call for requesting association of an XSLT transformation to an ML markup applied to a document, since Skonnard teaches using XSLT extension functions to associate an XSLT transformation to an ML markup applied to a document (p. 7, par. 6-7). Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, par. 8). Specifically, Skonnard teaches a series of XSLT functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, and the interface is operative to receive a return value from the XML schema library responsive to association of the XSLT transformation to the markup applied to the document (Fig. 10; p. 7).

**Regarding dependent claim 4**, Skonnard teaches that the association requester is arranged to request removal of an association of the ML schema file to the ML markup applied to the document since Skonnard teaches association requesters in the form of both XPath and XSLT extension functions, and that the association requester is further operative to receive a return value from the schema library responsive to

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removal of the association of the ML schema file to the markup applied to the document, (p. 7, "XPath and Type Information") since Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, par. 8). Specifically, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, therefore, it is implied in the disclosure of Skonnard that the function setting the association property allows removal of an association since the property may be reset, resulting in the removal of the association and receiving a return value from the schema library responsive to removal of the association, as depicted in Figs. 9 and 10.

**Regarding independent claim 5**, independent claim 5 is directed toward substantially similar subject matter as claimed in independent claim 1, and is rejected along the same rationale.

**Regarding dependent claim 6**, dependent claim 6 is directed toward substantially similar subject matter as claimed in dependent claim 2, and is rejected along the same rationale.

**Regarding independent claim 7**, Skonnard teaches a method for accessing the resources of a Markup Language (ML) schema library (p. 2-3, "A New XML Schema

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API: SOM"); Skonnard teaches a Schema Object Model (SOM) which is loaded into a programmable object and associated with a namespace URI (p. 3, par. 1). Skonnard teaches an API interface for allowing a user to select resources in a ML schema library (p. 4, par. 1). Skonnard teaches calling the schema library via an object-oriented message call and passing an object property to the schema library, the object property being associated with a software object associated with functionality identified in the ML schema library (p. 5-6), since Skonnard teaches, for example, calling and passing the root and node schema object properties of the schema library. Skonnard teaches that in response to the message call and the object property passed to the ML schema library, receiving access to the functionality identified in the schema library associated with the object property passed to the schema library, since Skonnard teaches that the user can drill down into a particular schema item using the appropriate interfaces (p. 6, par. 1-3).

**Regarding dependent claim 8**, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 7; p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, therefore it is implied in Skonnard that a new namespace is added to a collection, and a path and URI are passed to the schema library as parameters of the method object as shown at p. 7, par. 6-7 in the use of a standard namespace declaration to set the property.

**Regarding dependent claim 9**, Skonnard teaches a namespace manager class, which can be used to manage a stack of namespace bindings and their scope (p. 8, last paragraph), which allows registering namespaces and manifests in the schema library.

**Regarding dependent claims 10-12**, Skonnard teaches XPath and XSLT extension functions for accessing individual markup language resources from a collection of ML resources using a numerical index or keyword, where the index is passed as a parameter with the method property, controlling an alias name associated with a specified namespace identified in the library, and passing a pointer to the specified document at Fig. 12, "Other XPath Extension Functions", and Figs. 8 and 9.

**Regarding dependent claims 13-15**, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 7; p. 11-12, Fig. 9 and 10). Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute a transformation (p. 7, "XPath and Type Information"; especially p. 7, par. 8). Specifically, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, therefore, it is implied in the disclosure of Skonnard that the function setting the association property allows removal of an association since the property may be

reset, resulting in the removal of the association and receiving a return value from the schema library responsive to removal of the association, as depicted in Figs. 9 and 10.

**Regarding dependent claims 16 and 17**, Skonnard teaches XPath and XSLT extension functions for accessing individual transformations from a collection using a numerical index or keyword, where the index is passed as a parameter with the method property, and controlling an alias name associated with a specified namespace identified in the library at Fig. 12, "Other XPath Extension Functions", and Figs. 8 and 9.

**Regarding dependent claim 18**, Skonnard teaches an interactive XPath expression builder to associate a schema object with the input document to execute an XSLT transformation (p. 7, "XPath and Type Information"; especially p. 7, par. 8). Specifically, Skonnard teaches a series of functions for setting and returning a namespace association of a schema file to a markup applied to the document (p. 11-12, Fig. 9 and 10), and teaches how to programmatically set a property in Fig. 10, thus creating the association, therefore, it is implied in the disclosure of Skonnard that the function setting the association property allows removal of an association since the property may be reset, resulting in the removal of the association and receiving a return value from the schema library responsive to removal of the association, as depicted in Figs. 9 and 10.

***Response to Arguments***

10. Applicant's arguments filed 08/24/2006 regarding the rejections of claims 1-18 under 35 U.S.C. 101 have been fully considered but they are not persuasive. Applicant argues that in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result is "useful, tangible and concrete" (Remarks, p. 8, I. 2-5). Following applicant's line of reasoning, it is the examiner's opinion that the claimed invention does not produce a final result that is "useful, tangible and concrete", for example, independent claim 5 recites a result of *...the application programming interface operative to receive a return value from the XML schema library responsive to association of the one or more XML-based resources to the XML markup applied to the document*. An application programming interface operative to receive does not recite a tangible result, since although the interface is operative to receive, the claim does not positively recite receiving a return value. Further, even if the interface did receive a return value, a return value is not a "useful, tangible and concrete" result. Rather, claims 1-18 are at best directed to software *per se*, therefore the claim rejections under 35 U.S.C. 101 must be maintained.

11. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sosnoski, "XML and Java technologies: Document models, Part 1: Performance", p. 1-13, published September 1, 2001, IBM DeveloperWorks, available at <http://www-128.ibm.com/developerworks/xml/library/x-injava/>

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia Rutledge whose telephone number is 571-272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**Doug Hutton**  
**Primary Examiner**  
**Technology Center 2100**